

STORMWATER OPERATIONS AND MAINTENANCE MANUAL

BEST MANAGEMENT PRACTICE (BMP) PLAN

FOR

*WARREN COUNTY FISCAL COURT:
VARIOUS DEPARTMENTS & LOCATIONS*

November 2018

Plan Prepared By:

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1. Background and Introduction

The Good Housekeeping Operation and Maintenance Program (O&M Program) is developed to outline operational management and maintenance practices, policies, and procedures (or Best Management Practices, BMPs). The focus of this program is for reducing and/or preventing pollutants associated with municipal facilities and activities from entering receiving waters as outlined and/or required by the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit No. KYG20 as administered by the Kentucky Department for Environmental Protection, Division of Water (KYDOW), May 1, 2018. To view the Phase II MS4 Permit (O&M Section), click [Here](#)¹. (PDF page 14 out of 36, Section 2.2.6) An important aspect of this program is the annual training component.

The O&M Program will address:

- a) Municipal facilities
- b) Municipal operations
- c) Pollution prevention and good housekeeping control measures for reducing or eliminating the discharge of pollutants

2. Division of Stormwater Management Mission Statement

The Division of Stormwater Management has adopted a mission statement which reads:

“The Division of Stormwater Management was established to promote the health, safety, and welfare of Warren County citizens by preventing the pollution, impairment or destruction of its natural resources.”

3. Stormwater Related Ordinance Listing

Warren County Stormwater Ordinances include:

- a) Agency Creation – No. 07-17 WC
- b) Stormwater Management (EPSC) – No. 06-17 WC
- c) Illicit Discharge (IDDE) – No. 06-21A WC
- d) Post Construction Water Quality – No. 11-31 WC

***NOTE:** All of the ordinances that are listed above can be viewed on the Warren County Stormwater Webpage, near the bottom. Click [Here](#)² for the Stormwater Webpage.

4. Important Phone Numbers / Email Contacts

Public Works Department
(270) 843-5360

Stormwater Division WCFC DPW
(270) 843-5363 / 392-5292 Hotline
Warrenc.osm@ky.gov

5. Operations and Maintenance Resources

To effectively and properly maintain Warren County facilities, available resources play a large role. Consideration of available resources, staff, equipment, skill sets, and funding is required.

¹ <http://www.warrencountyky.gov/docs/S-Final-Permit-RTC-KYG.pdf>

² <http://www.warrencountyky.gov/stormwater>

6. Staff Resources

The County Road Department is responsible for construction, repair and maintenance of road infrastructures.

The County Stormwater Crew is responsible for drainage related work. Refer to [APPENDIX B - Sample Standard Dry Well Drawing](#), regarding drywell discharge.

The County Parks and Recreation Department is responsible for maintaining the fields at each park such as mowing and removal of leaves and making sure equipment is in working condition.

The County Emergency Management Department will assist in the follow through of the Emergency Operations Plan (EOP) for spills and any other emergency incidents.

All other Warren County Departments will contact one of the above Departments in the event affecting the waterways of Warren County and assist as needed.

7. Inspection of Facilities / Maintenance Scheduling

Drainage facilities are identified and documented using Spreadsheets in Excel. Inspections are performed bi-annually on a routine basis by the facility supervisor and work orders are issued when a facility needs repairing. As for repair of infrastructure, conditions are noted, and work orders are issued promptly upon inspections. Cleaning routines are performed bi-annually on all areas. Maintenance scheduling is as follows (may be modified depending on the needs): street sweeping, leaf removal, drywell installation/cleaning, and drainage structure maintenance are completed annually or on an as needed basis. Snow plowing occurs during the winter months or when there is a winter event.

8. Reporting Incidents

The County Emergency Management Department has developed the Emergency Operations Plan (EOP) for an “occurrence or event, natural or human-caused, which requires an emergency response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, wild land and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response”, as stated in the National Response Framework.

In response to a major failure of roads, bridges, and other infrastructure and the management of debris, due to natural or manmade incidents, the Emergency Support Function Three (ESF #3) section within the EOP discusses each phase of operation and the assignments of responsibilities via other departmental agencies of clearing and/or repairing of infrastructure systems.

In protecting human health, the environment, and property from the dangers of hazardous materials including chemical, biological, and radiological releases within Warren County, the Emergency Support Function Ten (ESF #10) section within the EOP discusses efforts

in reducing or removing the danger to public health, safety and the environment from threatening or causing incidents involving hazardous materials.

9. Risk Identification and Assessment

The entire EOP, mentioned in the previous section, was developed with risk assessment/management in mind. Kentucky Emergency Management (KYEM) strongly recommends Warren County Emergency Management use THIRA (Threat and Hazard Identification and Risk Assessment). To view the THIRA Guide, developed by the Federal Emergency Management Agency (FEMA), click [Here](#)³. This PDF discusses the THIRA process in three steps. Step one is identifying the threats and hazards of concern (PDF page 11 of 44). Step two is giving the threats and hazards context (PDF page 15 of 44). Step three is about establishing capability targets (PDF page 19 of 44). For an information sheet highlighting important facts, click [Here](#)⁴.

10. Material Compatibility

Materials, vehicles, BMPs, and potential pollutant sources are evaluated for materials compatibility. It should be determined that there is no hazardous, health and safety, or other stormwater issues that have not already been addressed through other plans, training, and procedures.

11. Employee Training

General Training is to be given to all facility employees so that they may be informed about policies and procedures that are new or not well known to help reduce and/or eliminate stormwater pollution. This will be performed at the annual county employee training seminar presented by the Stormwater Division. The intent of this training is to recommend, the employees, BMPs, per their respective facility, while informing them of why it was done and what to do or not do to protect it. New employees are encouraged to participate in the training session. A copy of the BMP Plan will be kept in a conspicuous location where all employees may review it, whether for normal activities or for emergency and spill response.

12. Good Housekeeping

Good housekeeping practices will be performed, to the maximum extent. For information on Good Housekeeping and other Runoff Controls, click [Here](#)⁵.

13. Modifications

The SWQMP (Stormwater Quality Management Plan), [Here](#)⁶ and BMPs implemented to comply with the permit shall be evaluated to determine the effectiveness of each. If either or both are ineffective and inadequate, then the permittee shall modify such Plans to replace ineffective stormwater controls.

³ https://www.fema.gov/media-library-data/1527613746699-fa31d9ade55988da1293192f1b18f4e3/CPG201Final20180525_508c.pdf

⁴ https://www.fema.gov/media-library-data/1388146249060-7b2abfe6be10c67c4070ed42deaaadf1/THIRA+Information+Sheet_20131104.pdf

⁵ <https://transportation.ky.gov/EnvironmentalAnalysis/Environmental%20Resources/7-Good%20Housekeeping.pdf>

⁶ <http://www.warrencountyky.gov/docs/stormwater-qmp.pdf>

APPENDIX A - Municipal Facilities Listing

1. Warren County Facilities

- a) City-County Planning Commission – This facility is located at 1141 State St
 - i. City-County Planning Commission office
 - ii. Contractors Licensing Board office
 - iii. Warren County Public Works’ office
- b) County Courthouse – This facility is located at 429 East 10th Ave
 - i. County Clerk’s office
 - ii. Sheriff’s Department office
 - iii. Judge Executive’s office
 - iv. Treasurer’s office
 - v. Fiscal Court
 - vi. Property Valuation Administrator’s (PVA’s) office
- c) County Child Support Satellite office – This facility is located at 360 East 8th Ave, Suite 301
- d) County Emergency Management (Old Jail Building) – This facility is located at 429 ½ East 10th Ave, Suite B
 - i. Emergency Management office
 - ii. Drug Task Force Office
- e) County Health Department office – This facility is located at 1109 State St
- f) County Justice Center – This facility is located at 1001 Center St, Suite 206
 - i. Attorney’s office
 - ii. Attorney Detective’s office
- g) County Parks and Recreation office – This facility is located at 2055 Three Springs Rd
- h) County Regional Jail office – This facility is located at 920 Kentucky St
- i) County Road Department office – This facility is located at 638 East 5th St
- j) County Stormwater Management Satellite office – This facility is located at 9222 Nashville Rd

2. Warren County Parks

- a) Basil Griffin - This facility is located at 2055 Three Springs Rd in Bowling Green (Warren County), Kentucky. It is approximately 111 acres.
- b) Ed Spear - This facility is located at 226 Sunset St in Smiths Grove (Warren County), Kentucky. It is approximately 17 acres.
- c) Ephram White - This facility is located at 885 Mount Olivet Rd in Bowling Green (Warren County), Kentucky. It is approximately 143 acres.
- d) G. H. Freeman - This facility is located at 545 Richpond-Plano Rd in Bowling Green (Warren County), Kentucky. It is approximately 7 acres.
- e) Michael O. Buchanon - This facility is located at 9222 Nashville Rd in Bowling Green (Warren County), Kentucky. It is approximately 92 acres.
- f) Phil Moore - This facility is located at 7101 Scottsville Rd in Alvaton (Warren County), Kentucky. It is approximately 174 acres.
- g) Romanza Johnson Park – This facility is located at 1396 Romanza Johnson Park Rd in Bowling Green (Warren County), Kentucky. It is approximately 3 acres.

3. Warren County Fire Stations

- a) Alvaton Volunteer Fire Station #1 – This facility is located at 6403 Old Scottsville Rd in Alvaton (Warren County), Kentucky.
- b) Alvaton Volunteer Fire Station #2 – This facility is located at 8352 Cemetery Rd in Bowling Green (Warren County), Kentucky.
- c) Alvaton Volunteer Fire Station #3 – This facility is located at 122 JFS Circle in Bowling Green (Warren County), Kentucky.
- d) Barren River Volunteer Fire Station #1 – This facility is located at 529 Brookwood Dr in Bowling Green (Warren County), Kentucky.
- e) Barren River Volunteer Fire Station #2 – This facility is located at 121 Jenkins Rd in Bowling Green (Warren County), Kentucky.
- f) Browning Volunteer Fire Station #1 – This facility is located at 3866 Browning Rd in Rockfield (Warren County), Kentucky.
- g) Browning Volunteer Fire Station #2 – This facility is located at 325 S Kitchens Rd in Bowling Green (Warren County), Kentucky.
- h) Gott Volunteer Fire Station – This facility is located at 5336 Porter Pike in Bowling Green (Warren County),

Kentucky.

- i) Hadley Volunteer Fire Station – This facility is located at 255 Hadley School Rd in Bowling Green (Warren County), Kentucky.
- j) Plano Volunteer Fire Station #1 – This facility is located at 3210 Plano Rd in Bowling Green (Warren County), Kentucky.
- k) Plano Volunteer Fire Station #2 – This facility is located at 7150 Woodburn-Allen Springs Rd in Bowling Green (Warren County), Kentucky.
- l) Richardsville Volunteer Fire Station #1 – This facility is located at 1185 Richardsville Rd in Bowling Green (Warren County), Kentucky.
- m) Richardsville Volunteer Fire Station #2 – This facility is located at 1170 Mt Olivet Girkin Rd in Bowling Green (Warren County), Kentucky.
- n) Richardsville Volunteer Fire Station #3 – This facility is located at 288 Oak St in Bowling Green (Warren County), Kentucky.
- o) Richardsville Volunteer Fire Station #4 – This facility is located at 9408 KY 185 in Bowling Green (Warren County), Kentucky.
- p) Richardsville Volunteer Fire Station #5 – This facility is located at 198 Slim Island Rd in Bowling Green (Warren County), Kentucky.
- q) Richardsville Volunteer Fire Station #6 – This facility is located at 3773 Riverside-Benleo Rd in Bowling Green (Warren County), Kentucky.
- r) Smiths Grove Volunteer Fire Station #1 – This facility is located at 6906 Gotts Hydro Rd in Smiths Grove (Warren County), Kentucky.
- s) Smiths Grove Volunteer Fire Station #2 – This facility is located at 120 S Main St in Smiths Grove (Warren County), Kentucky.
- t) Woodburn Volunteer Fire Station #1 – This facility is located at 900 Woodburn-Allen Springs Rd in Woodburn (Warren County), Kentucky.
- u) Woodburn Volunteer Fire Station #2 – This facility is located at 7055 Nashville Rd in Bowling Green (Warren County), Kentucky.

APPENDIX B - Sample Standard Dry Well Drawing

